ABSTRACT OF THE DISCLOSURE





A mixed crystal of two or more different benzimidazolonedioxazine compounds of the formula (1)

$$O = \bigvee_{N=1}^{R2} \bigvee_{N=1}^{N} \bigvee_{N=1}^{N} \bigvee_{N=1}^{R1'} \bigvee_{N=1}^{R1'} \bigvee_{N=1}^{R1'} \bigvee_{N=1}^{N} \bigvee_{N=1}^{R1'} \bigvee_{N=1}^{N} \bigvee_{N=1}^{R1'} \bigvee_{N=1}^{N} \bigvee_{N=1}^{R1'} \bigvee_{N=1}^{N} \bigvee_{N=1}^{N}$$

where

X and X' are identical or different and are hydrogen or halogen, R1, R1', R2 and R2' are identical or different and are hydrogen, C₁-C₁₈ alkyl, trifluoromethyl, C₁-C₁₈ alkylcarbonyl, C₅-C₆ cycloalkyl or phenyl which may be unsubstituted or substituted by one or more halogen atoms, nitro groups, trifluoromethyl, C₁-C₁₈ alkyl, C₁-C₁₈ alkoxy, C₁-C₁₈ alkylcarbonyl and/or C₁-C₁₈ alkoxycarbonyl groups.

The mixed crystals are of low solubility and feature good fastness properties and red to blue colorations.

The mixed crystals are suitable for pigmenting paints, plastics, printing inks, aqueous or solvent-based pigment preparations, electrophotographic toners and developers, powder coating materials, inks, preferably inkjet inks, color filters, and for coloring seed and cosmetics.